

ABSTRACT OF THE DISCLOSURE**METHOD AND APPARATUS FOR IMPLEMENTING PERMISSION BASED
ACCESS CONTROL THROUGH PERMISSION TYPE INHERITANCE**

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A method and apparatus for type independent permission based access control are provided. The method and apparatus utilize object inheritance to provide a mechanism by which a large group of permissions may be assigned to a codesource without having to explicitly assign each individual permission to the codesource. A base permission, or superclass permission, is defined along with inherited, or subclass, permissions that fall below the base permission in a hierarchy of permissions. Having defined the permissions in such a hierarchy, a developer may assign a base permission to an installed class and thereby assign all of the inherited permissions of the base permission to the installed class. In this way, security providers need not know all the permission types defined in an application. In addition, security providers can seamlessly integrate with many applications without changing their access control and policy store semantics. Moreover, application providers' security enforcement is no dependent on the security provider defined permissions. The method and apparatus do not require any changes to the Java security manager and do not require changes to application code..